

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (currently amended) A storage system, comprising:
a host configured to receive a data file from a client, the host including a data management rule set program that is operable to associate a management rule to the data file received from the client;
a first storage subsystem configured to receive and store the data file from the host, the storage system including a storage controller and a plurality of storage volumes, wherein the management rule is inserted into a header of the data file; and
a data protection server including a data protection management program that cooperates with the first storage subsystem to protect the data file stored in the first storage subsystem, the data protection server looking up the management rule inserted into the header of the data file to determine action to protect the data file.
2. (canceled)
3. (original) The storage system of claim 2, wherein the management rule relates to a retention period of the data file.
4. (original) The storage system of claim 1, wherein the first storage subsystem further comprises a data protection program that cooperates with the data protection management program of the data protection server to protect the data file stored in the first storage subsystem, wherein the management rule is attached to the data file and transmitted to the first storage subsystem with a data content of the data file.
5. (original) The storage system of claim 1, where the data file is stored in a first storage volume of the first storage subsystem, the storage system further comprising:

a data relocation server configured to manage relocation of the data file to a second storage volume from the first storage volume, the data relocation server including a data relocation management program and a storage information table including information about storage subsystems and storage media associated with the storage system, wherein the data relocation management program initiates the relocation of the data file to the second storage volume by looking up the storage information table for a suitable storage location for the second storage volume.

6. (original) The storage system of claim 5, wherein the second storage volume is located in a second storage subsystem of the storage system.

7. (original) The storage system of claim 1, wherein the data relocation server and the host are different devices.

8. (original) The storage system of claim 1, wherein the data protection server and the host are different devices.

9. (currently amended) The storage system of claim 1, wherein the data management rule set program of the host inserts a plurality of management rules into [[a]] the header of the data file, the management rules relating to information about a retention period and relocation instructions of the data file.

10. (currently amended) A management server provided in a storage system, the storage system including one or more hosts and one or more storage subsystems, the management server comprising:

a memory to store data;

a processor to process data;

a network interface to link with one or more computers of the storage system;

and

a first management program to attach a management rule to a data file to be stored in a storage subsystem of the storage system, the management rule relating to a retention period or relocation information of the data file,

wherein the data file and the management rule are stored in a storage volume of the storage subsystem;

wherein the management rule is inserted into a header of the data file; and
wherein the management server includes a second management program that cooperates with a file system to store the data file in the storage subsystem, the second management program looking up the management rule inserted into the header of the data file to determine action to take with respect to the data file.

11. (original) The server of claim 10, wherein the server is a host that is configured to receive data files from a client of the storage system and send read and write requests to the storage subsystem.

12. (currently amended) The server of claim 10, wherein the second management rule is inserted into a header of the data file, the server further comprising: program is a data protection management program or a data relocation management program.
~~a second management program that cooperates with a file system to store the data file in the storage subsystem.~~

13. (currently amended) A management server provided in a storage system, the storage system including one or more hosts and one or more storage subsystems, the management server comprising:

a memory to store data;

a processor to process data;

a network interface to link with one or more computers of the storage system;

and

a first management program operable to access a header of a data file to look up a management rule inserted in the header and manage the data file according to [[a]] the

management rule inserted in the header, the management rule relating to a retention period or relocation instructions of the data file.

14. (original) The server of claim 13, wherein the server is a data protection server and the first management program is a data protection management program.

15. (original) The server of claim 13, wherein the server is a data relocation server and the first management program is a data relocation management program.

16. (currently amended) A method for managing a data file stored in a storage system, the storage system including one or more client, one or more hosts, one or more storage subsystems, the method comprising:

receiving a data file including a header and a data content;

attaching a management rule to the data file;

storing the data file and the management rule at a first storage location in a first storage subsystem, the management rule relating to retention or relocation information of the data file; [[and]]

notifying a management program about the data file;

accessing the management rule attached to the data file; and

performing a management act relating to the data file according to the management rule,

wherein the management rule is inserted into a header of the data file.

17. (canceled)

18. (original) The method of claim 17, wherein the management rule is accessed by a data protection management program provided in a data protection server, the management act being an act related to preventing the data file stored in the first storage location from being modified or deleted.

19. (original) The method of claim 17, wherein the management rule is accessed by a data relocation server, and the management act relates to relocating the data file to a second storage location.

20. (currently amended) The method of claim 17, wherein the management rule is inserted into [[a]] the header of the data file by a host.